Plant Physiol. (2002) 130: xxxi–xxxv
0032-0889/02/130/xxxi/05

Author Index

A

Abdel-Ghany, Salah, 1309
Abrahams, Sharon, 561
Adam, Zach, 857
Adams-Phillips, Lori C., 1132
Akita, Kazumasa, 374
Alergand, Tal, 865
Allakhverdiev, Suleyman I., 1443
Allaway, William G., 1162
Allen, Gethyn J., 2152
Allred, C. Christy, 740
Alsheikh, Muath K., 675
Altman, Arie, 865
Alworth, William L., 1022
Amakawa, Taisaku, 1908
Ampomah-Dwamena, Charles, 605
An, Gynheung, 1636
An, Kyungsook, 1636
An, Suyoung, 1636
Andersen, Mathias Neumann, 591
Anderson, Marc D., 740
Anderson, Olin, 1706
Ando, Toshio, 374
Andrieu, Bruno, 1181
Anke, Sven, 47
Apuya, Nestor R., 1073
Arad, Tal, 857
Asami, Tadao, 1319
Asch, Folkard, 591
Ashford, Anne E., 1162
Ashton, Anthony R., 561
Avsian-Kretchmer, Orna, 199

B

Bach, Thomas J., 334
Bacher, Adelbert, 1717
Back, Jaap W., 904
Baluška, František, 415, 422
Bancoş, Simona, 504
Bañuelos, María A., 784
Bardat, Françoise, 265
Bar-Peled, Maor, 2188
Barre, Annick, 757
Barrière, Yves, 1675
Barrieu, François, 2101
Barry, Cornelius S., 1918
Bartholomew, Dolores M., 1562
Basu, Swati, 292
Beckert, Michel, 1675
Beckles, Diane M., 1464
Bednarek, Sebastian Y., 1241
Beeckman, Tom, 1883
Belanger, Faith C., 1298
Beligni, María Verónica, 1852
Belles-Boix, Enric, 657
Benfey, Philip N., 312, 538
Bennetzen, Jeffrey L., 1728
Bergounioux, Catherine, 1871
Berken, Antje, 847
Berleth, Thomas, 1883
Bernacchi, Carl J., 1992
Bert, Valérie, 1815
Betz, Christian, 1918
Beuerle, Till, 1536
Beussman, Douglas J., 1497
Bewley, J. Derek, 1254
Bi, Irie Vroh, 1598
Bishop, Gerard J., 504
Blázquez, Miguel A., 1770
Bligny, Richard, 244
Boisson, Anne-Marie, 244
Bolchi, Angelo, 58
Bölling, Christian, 2039
Bonfante, Paola, 58
Booij-James, Isabelle S., 2069
Boot, Kees J.M., 1349
Boronat, Albert, 1079
Boudet, Alain-Michel, 1675
Bourgault, Richard, 1254
Bourque, Stéphane, 2177
Bouzayen, Mondher, 1132
Bowers, John E., 1598
Bowers, Jonathan F., 895
Bowes, George, 876
Bown, Alan W., 514
Braam, Janet, 770
Braga, Márcia Regina, 1288
Brands, Alex, 1121
Brault, Mathias, 265
Brendel, Volker, 1594
Brian, Leigh, 292
Bruce, Doug, 1201
Brunold, Christian, 1406
Brutnell, Thomas P., 155
Buckhout, Thomas J., 2039
Buckner, Brent, 1894
Buell, C. Robin, 1585
Burkhead, Jason L., 1309
Burton, Rachel A., 1464
Butler, Ed, 1706

C

Cai, Lin, 666
Camasses, Alain, 1230
Canellas, Luciano Pasqualoto, 1951
Cantrel, Catherine, 999
Capron, Arnaud, 1230
Carbonell, Juan, 1454
Carbonero, Pilar, 111
Carmona, María José, 68
Carpinelli, Jorge, 1516
Cartinhour, Sam, 1606
Casal, Jorge J., 1181
Cejudo, Francisco Javier, 111
Chamayou, Simon, 1675
Champion, Anthony, 577
Chamusco, Karen C., 1645
Chan, Chui Sien, 1476
Chan, Ming-Tsair, 618
Chanasut, Usawadee, 273
Chandler, Vicki L., 1594
Chang, Caren, 10
Chang, Chwenn-In, 2076
Chang, Hur-Song, 720, 2129
Chang, Kuan, 1606
Chapital, Dorselyn C., 2027
Chapman, Kent D., 391
Charng, Yee-yung, 618
Charrier, Bénédicte, 577
Chassin, Yael, 857
Chelle, Michael, 1181
Chen, Feng, 466
Chen, Hsing-Yu, 1827
Chen, Lingjing, 199
Chen, Xiao-Ya, 477
Chen, Yizhu, 1999
Cheng, Jin-Chen, 199
Cheng, Ning-Hui, 666
Cheng, Weijun, 1545
Childs, Kevin L., 1614
Cho, Jennifer, 519
Choe, Sunghwa, 1506
Choo, Tze Siang, 1754
Chourey, Prem S., 1645
Chrispeels, Maarten J., 2101
Clack, Ted, 442
Clancy, Maureen, 918
Clark, Ken Y., 1606
Clayton, John C., 303
Close, Pam S., 1894
Clouse, Steven D., 770
Coe, Edward H., Jr., 1686
Colman, Brian, 284
Concetta de Pinto, Maria, 698
Cone, Karen C., 1598
Conrath, Uwe, 120
Cook, Daniel, 639
Cornel, Daniel, 265
Cornelissen, Ben J.C., 904
Cornelissen, Marc, 1190
Cosgrove, Daniel J., 895
Costich, Denise E., 155
Criqui, Marie Claire, 1230
Cubas, Pilar, 68
Cubero, Beatriz, 784
Cui, Li Wei, 740
Cunha, Fernando Queiroz, 1288

D

Damsz, Barbara, 221
Datla, Raju, 210
Datta, Rupali, 1645
D'Auria, John C., 466
Davenport, Romola J., 1386
Davies, John P., 2076
Davis, Georgia L., 1598, 1686
De Bellis, Luigi, 2019
de Boer, Albert D., 904
Decker, Adria D., 1221
De Gara, Laura, 698
Degenhardt, Jörg, 2049
Dekker, Henk L., 904
de Koster, Chris G., 904
Delrot, Serge, 2177
Deng, Xing Wang, 457
Denyer, Kay, 190, 1464
DeRidder, Ben P., 1497
De Rycke, Riet, 1883
DeSalle, Rob, 538
Dickey, Carrie E., 1241
Didierjean, Luc, 179
Digonnet, Catherine, 1675
Ding, Biao, 138
Dixon, David P., 1497
Donohue, Christine M., 1545
Douce, Roland, 244
Douglas, Carl J., 1837
Duru, Ngozi A., 1686
D'Urzo, Matilde Paino, 221
Dyer, John M., 2027

E

Edelman, Marvin, 2069
Edwards, Gerald E., 964, 1573
Edwards, Robert, 1497
Ehlting, Jürgen, 1837
Eisenreich, Wolfgang, 1717
Ema, Jun-ichi, 2164
Emberton, John, 1728
Emons, Anne Mie C., 977
Engler, Janice de Almeida, 1230
Esaki, Nobuyoshi, 1309
Espie, George S., 284

F

Façanha, Arnoldo Rocha, 1951
Fahy, Brendan F., 190
Falk, Jon, 1172
Fang, Su-Chiung, 78
Fang, Zhiwei, 1598
Farmer, Phyllis R., 155
Farquhar, Graham Douglas, 1008
Farrar, John F., 1335
Fatland, Beth L., 740
Faye, Loïc, 1754
Fayolle, Léon, 2177
Fedorova, Maria, 519
Feldman, Lewis J., 720
Feldman, Moshe, 1587
Feldmann, Joerg, 1552
Feldmann, Kenneth A., 1506
Felle, Hubert H., 940
Fernandez, Donna E., 78
Feussner, Ivo, 273
Fincher, Geoffrey B., 1464
Fischer, Robert L., 1073
Frak, Ela, 1043
Franceschi, Vincent R., 649, 964
Fricker, Mark D., 1927
Fry, Rebecca C., 457
Fuchs, Esther, 312
Fujioka, Shozo, 930, 1319, 1506
Fukuchi-Mizutani, Masako, 2164
Fukui, Yuko, 2142

G

Gakiere, Bertrand, 147
Galili, Gad, 147
Gallagher, Joe, 1335
Gallais, André, 1860
Gan, Kim Suan, 1008
Gang, David R., 1536
Gantt, J. Stephen, 519
Garciadeblas, Blanca, 784
García-Martínez, Santiago, 951
Gardiner, Jack M., 1598, 1686
Garifullina, Gulnara F., 1309
Garretón, Virginia, 1516
Garvin, David F., 1361
Gawer, Myriam, 999
Geisler, Matt, 1747
Genschik, Pascal, 1230
Gershenzon, Jonathan, 2049
Ghelis, Thanos, 265
Gibbard, Carl L., 303
Gibson, Kelly M., 1573
Gierl, Alfons, 1717
Gilliland, Laura U., 2199
Giovannoni, James J., 1132
Glab, Nathalie, 1871
Glass, Anthony D.M., 1263
Glawischnig, Erich, 1717
Glevarec, Gaëlle, 1860
Goda, Hideki, 1319
Goffner, Deborah, 1675
Goldbach, Heiner E., 415
Goldberg, Robert B., 1073
Golden, Teresa A., 808
Goldsbrough, Peter B., 1497
Gondet, Laurence, 179
Gong, Deming, 256
Goodman, Howard M., 1797
Goto, Nobuharu, 1908
Gotor, Cecilia, 2076
Goussias, Charilaos, 2011
Gout, Elisabeth, 244
Grandjean, Olivier, 657
Gray, John, 1894
Graziano, Magdalena, 1852
Green, Pamela J., 1454
Grierson, Donald, 1918
Griffiths, Gareth, 273
Gross, Elisabeth M., 2011
Grossniklaus, Ueli, 808
Gruissem, Wilhelm, 1090
Guillaumie, Sabine, 1043
Guo, Yan, 256
Gustafson, J. Perry, 1706

H

Haake, Volker, 639
Habashi, Jessica, 457
Hale, Kerry L., 1309
Hall, Dawn E., 514
Hallouin, Matthieu, 265
Hamant, Olivier, 657
Han, Jong-Jin, 1636
Hanley, Nicole P., 155
Hannah, L. Curtis, 918
Hänsch, Robert, 47
Hanstein, Stefan M., 940
Harada, John J., 1073
Hara-Nishimura, Ikuko, 1807, 2019
Harding, Scott A., 796
Harker, Mark, 303
Harper, April D., 2188
Harper, Jeff F., 2129
Harper, Jeffrey F., 128
Hartmann, Marie-Andrée, 334
Hartmann, Thomas, 47
Hase, Sumihiro, 374
Hause, Bettina, 757, 1213
Hauser, Marie-Theres, 312
Haussühl, Kirsten, 1172
Havermann, Seth A., 1598
Hayashi, Hiroshi, 2019
Hayashi, Makoto, 2019
Hayashi, Yasuko, 1807, 2019
Hazemann, Jean-Louis, 1815
Hellyer, Amanda, 303
Hennig, Lars, 1090
Henry, Yves, 577
Herbik, Alexandra, 2039
Herms, Stefan, 120
Herron, Michelle, 1436
Hesse, Holger, 1406
Heyen, Bruce J., 675
Hirel, Bertrand, 1860
Hirji, Rozina N., 210
Hirochika, Hirohiko, 1152
Hirschi, Kendal D., 1054
Hlavacka, Andrej, 415, 422
Ho, Tuan-hua David, 1121
Hoeberichts, Frank A., 1764
Hohtola, Anja, 729
Holk, André, 90
Holmberg, Niklas, 303
Holuigue, Loreto, 1516
Hong, Bimei, 128
Horton, Peter, 1999
Hosokawa, Satoko, 1908
Houterman, Petra M., 904
Howe, Gregg A., 494
Hsieh, Ming-Hsiun, 1797
Hsieh, Tsai-Hung, 618
Hu, Jialiang, 757
Hubbart, Stella, 1999
Huber, Christian G., 1938
Huertas, I. Emma, 284
Huete, Alicia Rodriguez, 1706
Hugouvieux, Véronique, 1276, 2152
Huner, Norman P.A., 1414
Husted, Søren, 989
Hylton, Christopher M., 190

I

Ichii, Masahiko, 2111
Iliev, Emanuil A., 770
Inagaki, Noritoshi, 1443
Inohara-Ochiai, Misa, 2164
Inoue, Masayoshi, 1776
Inzé, Dirk, 1230, 1883
Isabel-Lamoneda, Ines, 111
Ishii, Tadashi, 1967
Ishimizu, Takeshi, 374
Ishizaka, Masumi, 1152
Ivanov, Alexander G., 1414
Iwai, Hiroaki, 1967

J

Jaakola, Laura, 729
Jablonska, Barbara, 1747
Jagendorf, Andre T., 256
Jaiswal, Pankaj, 1606
Janick-Buckner, Diane, 1894
Jasinski, Sophie, 1871
Jauneau, Alain, 1675
Jeannette, Emmanuelle, 265
Jenner, Helen L., 1464
Jensen, Christian Richardt, 591
Jeong, Dong-Hoon, 1636
Jia, Jun-Wei, 477
Jiang, Ning, 1697
Johal, Gurmukh S., 1894
Johnson, Philip E., 1464
Johnson, Russell R., 837
Johnston, Jerry L., 740
Jones, Brian, 1132
Jordan, I. King, 1697
Jordana, Xavier, 1516
Jublot, Delphine, 657

K

Kader, Jean-Claude, 999
Kahana, Anat, 147
Kahmann, Uwe, 47
Kaiser, Brent N., 1263
Kajiwara, Hideyuki, 1152
Kandasamy, Muthugapatti K., 2199
Kanesaki, Yu, 1443
Kang, Hong-Gyu, 1636
Kangasjärvi, Jaakko, 549, 1918
Kao, Yu-Ying, 796

Kapri-Pardes, Einat, 857
Kärenlampi, Sirpa, 729
Kartha, Cyril J., 210
Karthikeyan, Athikkattuvalasu S., 221
Kato, Akira, 2019
Kato, Shin-Ichiro, 1309
Ke, Jinshan, 740
Kende, Hans, 1396
Kern, Volker Dieter, 2095
Kiirats, Olavi, 964, 1573
Kikuchi, Shoshi, 1152
Kim, Soo Young, 688
Kliebenstein, Daniel J., 234
Klüsener, Birgit, 2152
Koch, Karen Elaine, 591
Kochian, Leon V., 1361
Koehle, Harald, 120
Kohchi, Takayuki, 1958
Köllner, Tobias G., 2049
Koncz, Csaba, 504
Kondo, Maki, 1807
Koo, Abraham J.K., 823
Koop, Randy, 1201
Kopriva, Stanislav, 1406
Korhonen, Minna-Sisko, 549
Koroleva, Olga A., 1335
Krähenbühl, Urs, 1406
Kramell, Robert, 1213
Kreis, Martin, 577
Kreps, Joel A., 2129
Krieger-Liszkay, Anja, 2011
Krupinska, Karin, 1172
Kuan, Jui-Chang W., 2027
Kurihara, Tatsuo, 1309
Kurylo, Eugen, 210
Kusumi, Takaaki, 2142
Kwak, June M., 1276
Kwon, Chil Y., 1545

L

Lagudah, Evans S., 362
Lamattina, Lorenzo, 1852
Landry, Laurie G., 234
Lanfranco, Luisa, 58
Lang, Jean D., 808
Langebartels, Christian, 1918
Lapierre, Catherine, 1675
Larkin, Philip J., 561
Last, Robert L., 234
Latché, Alain, 1132
Lau, Rachel, 1883
Lau, Sze-Mei Cindy, 179, 1562
Lawrence, Christopher B., 164
Lea, Peter J., 964
Leckband, Gunhild, 1172
Leclercq, Julie, 1132
Lee, Dong Ju, 2085
Lee, Gyu In, 494
Lee, Hyun Sook, 1636
Lee, Jent-Turn, 618
Lee, Mi-Ok, 1506
Lee, Yi, 1396
Lemoine, Rémi, 2177
Leon, Jose, 1454
Lerouge, Patrice, 1754
Le Roux, Xavier, 1043
Lerouxel, Olivier, 1754
Leu, Eva, 2011
Leustek, Thomas, 2076
Levanony, Hanna, 147
Leverentz, Michael K., 273
Levy, Avraham A., 1587
Lhuissier, Franck G.P., 977
Li, Chuanyou, 494
Li, Huaijun Michael, 1298
Li, Jianming, 1221
Li, Xue-Bao, 666
Li, Zhongsen, 688
Liang, Feng, 128
Liang, Hongjian, 1143
Lim, Jackie E., 234
Limami, Anis M., 1860
Linden, James C., 164
Linley, Philip J., 155
Linton, Eric W., 1686
Liu, Feng, 1657
Liu, Jian-Wei, 666
Llaca, Victor, 1728
Loh, Ying-Tsu, 494
Long, Stephen P., 1992
Lörz, Horst, 1172
Lu, Chungui, 1335
Lu, Shan, 477
Lynn, James R., 102
Lyssenko, Nicholas N., 1487

M

Ma, Jian Feng, 2111
Ma, Jianzhong, 688
Ma, Seung-Jin, 2164
Määttä, Kaisu, 729
MacGregor, Kennaway B., 514
Mackesy, Daniel Z., 1276
Maddonni, Gustavo Angel, 1181
Maekawa, Kenji, 1776
Magnin, Noël C., 876
Maier, Walter, 1213
Malik, Mukesh, 2118
Malone, Michael, 1436
Manceau, Alain, 1815
Marcus, Matthew A., 1815
Mariani, Celestina, 1190
Martínez-Zapater, José M., 68
Martre, Pierre, 2101
Masle, Josette, 1263
Mathews, Dennis E., 1983
Matoh, Toru, 415, 422
Matsuda, Seiichi P.T., 477
Matsumoto, Peter A., 519
Matsunaga, Toshiro, 1967
Matsushima, Ryo, 1807
Mattoo, Autar K., 2069
Mattsson, Marie, 989
Matzke, Antonius J.M., 6
Matzke, Marjori, 6
McClung, C. Robertson, 627
McConnell, Michael D., 1201
McCormac, Alex C., 402
McCouch, Susan R., 1606
McCurdy, David W., 422
McDermott, Jeffery P., 2076
McGrath, Robert. B., 102
McGrath, Steve P., 1552
McKeon, Thomas A., 2027
McMullen, Michael D., 1598, 1686
Meagher, Richard B., 2199
Meharg, Andrew A., 1552
Meijer, Annemarie H., 1349
Meinhardt, Steven W., 1545
Meinke, David W., 808
Mena, Montaña, 111
Mentzen, Wieslawa I., 740
Menzel, Diedrik, 415, 422
Messing, Joachim, 1626, 1728
Messing, Joachim W., 1686
Mette, M. Florian, 6
Mewes, Heiko, 1527
Meyer, Andreas J., 1927
Michael, Todd P., 627
Micol, José Luis, 951
Miersch, Otto, 1213
Miginiac, Emile, 265
Mihara, Hisaaki, 1309
Mila, Isabelle, 1675
Milla, Miguel A. Rodriguez, 1706
Millar, Andrew J., 102
Millard, Peter, 1043
Minagawa, Jun, 325
Mino, Masanobu, 1776
Minorsky, Peter V.,
1, 4, 515, 517, 1075, 1077, 1739, 1745
Miskiewicz, Ewa, 1414
Mittler, Ron, 1143
Miyairi, Sachio, 1443
Mizutani, Masaharu, 2164
Moctezuma, Edgar, 199
Modolo, Luzia Valentina, 1288
Moeder, Wolfgang, 1918
Mogensen, Vagn Overgaard, 591
Moll, Stefanie, 47
Möllers, Christian, 989
Molnár, Gergely, 504
Moon, Sunok, 1636
Moore, L. David, 1614
Moose, Stephen P., 362
Morales, M.-Angeles, 1436
Mori, Izumi C., 2152
Mori, Masaki, 1152
Morillon, Raphaël, 2101
Morishige, Daryl T., 1614
Morris, Bret A., 605
Moseyko, Nick, 720
Mount, Stephen M., 10
Moy, Melinda, 1298
Muday, Gloria K., 292, 1426
Mueller-Roeber, Bernd, 22
Mukatira, Uthappa T., 221
Mullen, Robert T., 2027
Müller, Sabine, 312
Mullet, John E., 1614
Muramoto, Takuya, 1958
Murata, Norio, 1443
Murata, Yoshiyuki, 1276, 2152
Murchie, Erik H., 1999
Murtas, Giovanni, 102
Mushegian, Arcady R., 808
Musket, Theresa A., 1686

N

Nadaud, Isabelle, 1675
Næsted, Henrik, 591
Nagy, Ferenc, 504
Nair, Ramesh B., 210
Nakamori, Akira, 325
Nakamura, Noriko, 2142
Nakanishi, Hidemitsu, 2164
Nakano, Hiromi, 1992
Nakao, Masahiro, 2164
Nakashima, Kazuo, 709
Nakayama, Toru, 2142
Naldrett, Mike J., 190, 1464
Nath, Pravendra, 1487
Nebenführ, Andreas, 1102
Ni, Junjian, 1606
Niinemets, Ülo, 1371
Nikolau, Basil J., 740

Nikov, Georgi N., 1022
Nishimura, Mikio, 1807, 2019
Nishino, Tokuzo, 2142
Nishiyama, Yoshitaka, 1443
Nito, Kazumasa, 2019
Nobel, Park S., 2101
Noguchi, Etsuko, 2164
Nogué, Fabien, 657
Nomura, Takahito, 504, 1152
Noordermeer, Minke A., 391
North, Gretchen B., 2101

O

Ober, Dietrich, 47
Ogawa, Ken'ichi, 1776
Ogden, Matthew, 1728
Oh, Man-Ho, 770
Ohlrogge, John B., 347, 823
Okabe, Ken, 1152
Okamoto, Haruko, 457
O'Keefe, Daniel P., 179, 1562
Okita, Thomas W., 1573
Okorokova-Façanha, Anna L., 1951
Olivares, Fabio Lopes, 1951
Olsson, Pål Axel, 1162
O'Neill, Damian P., 1974
Ono, Taka-aki, 325
Ooka, Hisako, 1152
Oono, Yutaka, 1908
Orozco-Cárdenas, Martha L., 487
Otegui, María Elena, 1181
Ottonello, Simone, 58
Ovecka, Miroslav, 312
Owens, Robert, 138

P

Palme, Klaus, 422
Palva, E. Tapio, 549
Pan, Xioakang, 1606
Pang, Jihai, 477
Park, Sang-Wook, 164
Park, Sookhee, 1241
Park, Sunhee, 1636
Parmentier, Yves, 1230
Paterson, Andrew H., 1598
Patron, Nicola J., 190
Pauly, Markus, 1754
Pautot, Véronique, 657
Pawloski, Lucia C., 2199
Pech, Jean-Claude, 1132
Pelah, Dan, 865
Pellinen, Riikka I., 549
Peng, Hsiao-Ping, 1476
Peng, Peng, 1221
Peng, Shaobing, 1999
Pepperman, Armand B., 2027
Perennes, Claudette, 1871
Perez-Amador, Miguel A., 1454
Perkins, Roberta, 179
Perret, Philippe, 688
Peumans, Willy J., 757, 1063
Pezzotti, Mario, 1190
Pical, Christophe, 22
Pichersky, Eran, 466, 1536
Pichon, Magalie, 1675
Pien, Stéphane, 808
Pilon, Marinus, 1309
Pilon-Smits, Elizabeth A.H., 1309
Pineda, Omaira, 639
Piquemal, Joel, 1675
Piqueras, Pedro, 951
Pirttilä, Anna Maria, 729
Pittman, Jon K., 1054
Pogson, Barry J., 1109
Polacco, Mary L., 1598, 1686
Polisensky, Diana H., 770
Pollock, Chris J., 1335
Ponce, María Rosa, 951
Porchia, Andrea Celia, 432
Porta, Helena, 15
Portis, Archie R., 1992
Proost, Paul, 757, 1063
Proux, Olivier, 1815
Przemeck, Gerhard K.H., 1883
Pugin, Alain, 2177
Puigdomenech, Pere, 1675

Q

Qi, Yijun, 138
Qu, Xiang, 1983
Quader, Hartmut, 90
Quatrano, Ralph L., 292
Quesada, Víctor, 951

R

Raab, Andrea, 1552
Raghothama, Kashchandra G., 221
Rahman, Abidur, 1908
Raikhel, Natasha V., 3
Rajasekharan, Ram, 380
Ramakrishna, Wusirika, 1728
Rancour, David M., 1241
Randall, Stephen K., 675
Rao, Srinath K., 876
Rashotte, Aaron M., 1426
Rasmussen, Jack B., 1545
Ravina, Cristina G., 2076
Rawat, Suman R., 1263
Rawlins, Sally, 303
Ray, Animesh, 808
Raychaudhuri, Aniruddha, 2061
Rea, Philip A., 1562
Reichstein, Markus, 1371
Reiskind, Julia B., 876
Rennenberg, Heinz, 1406
Rep, Martijn, 904
Reyes, José C., 1090
Richter, Michael, 1527
Riechers, Dean E., 362
Riechmann, José Luis, 639
Rietz, Steffen, 90
Rigau, Joan, 1675
Rinalducci, Sara, 1938
Ritzenthaler, Christophe, 1102
Rizhsky, Ludmila, 1143
Ro, Dae-Kyun, 1837
Robertson, Dominique, 1426
Robinson, David G., 422, 1102
Rocha-Sosa, Mario, 15
Rodríguez-Concepción, Manuel, 1079
Rodríguez-Navarro, Alonso, 784
Roeb, Gerhard W., 1788
Rogers, Hilary J., 273
Rona, Jean-Pierre, 265
Ros, Emanuele Cesale, 58
Ross, John J., 1974
Rossel, Jan Bart, 1109
Rossnagel, Brian G., 190
Roudier, François, 538
Rougé, Pierre, 757
Rouhier, Hervé, 1162
Rouillon, Clothilde, 1860
Rudrabhatla, Parvathi, 380
Rueb, Saskia, 1349
Ruelland, Eric, 999
Ryan, Clarence A., 487

S

Sack, Fred David, 2095
Safford, Richard, 303
Sakata, Kanzo, 2164
Salgado, Ione, 1288
Šamaj, Jozef, 422
Sanchez-Villeda, Hector, 1598
Sandermann, Heinrich, 1918
SanMiguel, Phillip, 1728
Sarret, Géraldine, 1815
Sato, Tatsuro, 504
Satoh, Kouji, 1152
Satoh, Rie, 709
Satoh, Shinobu, 1967
Saumitou-Laprade, Pierre, 1815
Sawers, Ruairidh J.H., 155
Scarpella, Enrico, 1349
Schäfer, Anke, 1172
Schaller, G. Eric, 1983
Schaller, Hubert, 179
Schauer, Stephen E., 808
Scheller, Henrik Vibe, 432
Scherer, Günther F.E., 90
Schindelman, Gary, 538
Schjoerring, Jan K., 989
Schmidt, Steven C., 1606
Schmitz, Robert J., 1221, 1506
Schnable, Patrick S., 1657
Schnee, Christiane, 2049
Schoch, Guillaume A., 1022
Schroeder, Julian I., 1276, 2152
Schroeder, Steven G., 1598
Schwender, Jörg, 347
Schwuchow, Jochen Michael, 2095
Seals, Darren F., 675
Seehaus, Kai, 120
Seki, Motoaki, 709
Selvaraj, Gopalan, 210
Sequeira-Legrand, Anabelle, 2177
Seufert, Günther, 1371
Séveno, Martial, 1754
Sharrock, Robert A., 442
Shigaki, Toshiro, 1054
Shih, Ming-Che, 1476
Shimada, Tomoo, 1807
Shimada, Yukihisa, 1319
Shinozaki, Kazuo, 709
Shipp, Matthew J., 1426
Shoseyov, Oded, 865
Shrestha, Rhidaya, 391
Siddiqi, M. Yaeesh, 1263
Sieberer, Björn J., 977
Silkowski, Helena, 273
Sinvany, Galit, 857
Smith, Alison M., 190
Smith, Elizabeth A., 675
Soderlund, Carol A., 1598, 1686
Sohlenkamp, Christian, 1788
Song, Rentao, 1626
Sørensen, Susanne Oxenbøll, 432
Sotta, Bruno, 265
Speijer, Dave, 904
Spiro, Mark D., 895
Springer, Patricia S., 1747
Sreevidya, Coimbatore S., 1054
Stamatiou, George, 1883
Staswick, Paul E., 887

Staudt, Michael, 1371
Stead, Anthony D., 273
Stein, Lincoln D., 1606
Strack, Dieter, 1213
Sugimoto, Kazuhiko, 1152
Sullivan, Ray, 1298
Sun, Haiguo, 292
Sun, Jindong, 1573
Sung, Z. Renee, 199
Sussman, Michael R., 128
Suter, Marianne, 1406
Sutherland, Paul, 605
Suzuki, Hirokazu, 2142
Swegle, W. Mark, 2069
Swennen, Rony L., 1063
Sze, Heven, 128
Szekeres, Miklós, 504

T

Tagmount, Abderrahmane, 847
Takatsuto, Suguru, 930, 1506
Tamai, Kazunori, 2111
Tanaka, Yoshikazu, 2142
Tang, Guiliang, 147
Tanner, Gregory J., 561
Taoshita, Junji, 1967
Tarlyn, Nathan M., 649
Tauriainen, Airi A., 549, 1918
Tax, Frans E., 1221, 1506
Tenhunen, John D., 1371
Teramoto, Haruhiko, 325
Terry, Matthew J., 155, 402, 1958
Terry, Norman, 847
Terryn, Nancy, 1883
Teytelman, Leonid, 1606
Thain, Simon C., 102
Thomas, Brian, 273
Thomas, Terry L., 688
Thomashow, Michael F., 639
Timmers, Antonius C.J., 977
Timperio, Anna Maria, 1938
Tipton, Peter A., 2061
Tiryaki, Iskender, 887
Tomas, Adriana, 1717
Tommasi, Franca, 698
Tomos, A. Deri, 1335
Torisky, Rebecca S., 770
Törrönen, Riitta, 729
Torvik, Carl F., 675
Town, Christopher D., 519, 2118
Traas, Jan, 657
Traverse, Agnès, 1815
Trénor, Marta, 1770
Tsai, Chung-Jui, 796
Tsakraklides, George P., 2076
Tsukamoto, Tatsuya, 374
Tsurui, Noriyuki, 1958
Tsurumi, Seiji, 1908
Tucker, Mark L., 1487
Tuomainen, Jaana, 1918
Turner, Charlotta, 2027
Tzeng, Tsai-Yu, 1827

U

Udvardi, Michael K., 1788
Ueoka-Nakanishi, Hanayo, 1054
Ullmann, Pascaline, 1536
Usadel, Björn, 1754
Utriainen, Merja, 1918

V

van Aarle, Ingrid M., 1162
Vance, Carroll P., 519
Van Damme, Els J.M., 757, 1063
van de Mortel, Judith, 519
VandenBosch, Kathryn A., 519
van der Bent, Arie, 1764
van der Kooij, Tom A.W., 1172
van der Rest, Benoît, 244
Van der Stelt, Marcelis, 391
van der Winden, Johannes, 6
Van Dyk, Drew E., 1562
Varadarajan, Deepa K., 221
Varkonyi-Gasic, Erika, 514
Vasil'ev, Sergej, 1201
Vega, Jose M., 2076
Veit, Bruce, 605
Veldink, Gerrit A., 391
Verhey, Steven D., 837
Viitanen, Paul V., 1562
Vivanco, Jorge M., 164
Volkmann, Dieter, 415, 422
von Ballmoos, Peter, 1406
von Caemmerer, Susanne, 1992
Vossen, Jack H., 904

W

Wagner, Ryan L., 837
Wagstaff, Carol, 273
Walker-Simmons, Mary K., 837
Wallace, Andrew D., 303
Wallbraun, Michael, 989
Wang, Junru, 1552
Wang, Wang-Xia, 865
Wang, Xun, 720, 2129
Wang, Yi-Hong, 1361
Ware, Doreen H., 1606
Weichert, Heiko, 273
Weigel, Detlef, 1770
Wendler, Renate, 1043
Wentzinger, Laurent F., 334
Werck-Reichhart, Danièle, 179, 1022, 1536
Wessler, Susan R., 1697
Weterings, Koen, 1190
White, Derek William Richard, 514
White, James F., Jr., 1298
White, Philip J., 1386
Whitelaw, Catherine A., 1487, 2118
Williams, Mark M., 494
Wilson, Cindy F., 1706
Wilson, Iain W., 1109
Woltering, Ernst J., 1764
Wong, Suan Chin, 1008
Wood, Craig C., 1788
Wu, Guo Feng, 2111
Wu, Yajun, 2129
Wu, Yong, 591
Wu, Zhongyi, 128
Wurtele, Eve Syrkin, 740
Wyatt, Sarah E., 1426
Wysocka-Diller, Joanna, 312

X

Xia, Qun, 210
Xiao, Yong-Li, 2118
Xu, Fangxiu, 362
Xu, Ran, 477
Xu, Wei, 770
Xun, Yan, 138

Y

Yadegari, Ramin, 1073
Yamagishi, Hiroshi, 1776
Yamaguchi, Masa-atsu, 2142
Yamaguchi-Shinozaki, Kazuko, 709
Yamamoto, Hiroshi, 1443
Yamamoto, Koji, 1152
Yang, Chang-Hsien, 1827
Yang, Jyisy, 1032
Yao, Jia-Long, 605
Yap, Immanuel V., 1606
Yen, Hungchen E., 1032
Yim, Young-Sun, 1598, 1686
Yokota, Akiho, 1958
Yokota, Takao, 504, 1152
Yonekura-Sakakibara, Keiko, 2142
Yong, Jean Wan Hong, 1008
Yoshida, Shigeo, 930, 1319, 1506
Young, Jared J., 1276, 2152
Young, Jeff C., 128
Yu, Qin, 415

Z

Zachowski, Alain, 999
Zahn, Marc, 90
Zeevaart, Jan A.D., 2085
Zegzouti, Hicham, 1132
Zhang, James Z., 639
Zhao, Fang-Jie, 1552
Zhao, Jun, 1221
Zhao, Wei, 1606
Zhao, Xue-Chu, 1983
Zhu, Jian-Kang, 256
Zhu, Tong, 720, 2129
Zhu, Xiaohong, 147
Zhu, Yali, 138
Zolla, Lello, 1938

root hair of, auxin and ethylene response interaction during development of, 1908
salt, osmotic, and cold stress in, transcriptome changes in response to, 2129
salt tolerance in, genetics of, 515, 951
seeds of, ABI5 subfamily members in, 688
selenium volatilization in, *S*-adenosyl-L-methionine:L-methionine *S*-methyltransferase in, 847
sepal and petal of, lily and lisianthus MADS box gene-induced homeotic conversion in, 1827
shaggy-like kinase multigene family in, profiling by real time reverse transcriptase PCR, 577
starch mutants of, growth, carbohydrates, and Rubisco in, nitrate and CO_2 interaction and, 1573
stress conditions in, endoplasmic reticulum-derived structure induced under, 1739, 1807
TCH4 expression in, regulation by diverse stimuli and brassinosteroids, 770
thylakoid lumen protease DegP1 from, 857
tissue-specific gene expression in, circadian control of, 102
tomato *LeCTR1* gene ethylene signaling ability in, 1132
transposable element families in, short RNAs and, 6
UDP-xylose biosynthesis in, 2188
ultraviolet B-hypersensitive mutant of, 234
wound response of, polyamines in, 1454
zinc forms accumulated in, 1815
Arabinoxylan biosynthesis, in wheat, 432
Arachis hypogaea (*see* Peanut)
Arbuscular mycorrhizal fungus
on barley roots, jasmonate biosynthesis in, 1213
on carrot, phosphorus and metabolic processes in, 1162
metallothionein gene from, 58
Arginine decarboxylase *ADC2* gene, in Arabidopsis wound response, 1454
Arsenic, hyperaccumulation in fern, 1076, 1552
Artemisia annua, β-pinene synthase from, circadian expression of, 477
Artichoke (*see also* Jerusalem artichoke)
Ascorbic acid, phloem transport of, in Arabidopsis and *Medicago sativa*, 649
Aspen
phenylalanine ammonia-lyase genes in, metabolism and, 796
SP1 from, 865
Asteraceae, homospermidine synthase localization in, 47
AtAMT2 plasma membrane ammonium transporter, in Arabidopsis, 1788
AtCDC48, characterization of, 1253
ATP-citrate lyase, acetyl-coenzyme A generated by, in Arabidopsis, 740
Auxin
alkalinization and growth response induced by, in cucumber seedlings, 895
ethylene interaction with, during root hair development in Arabidopsis, 1908
Fucus distichus embryo development sensitive to, 292
pea gibberellin pathway regulation by, 1974
Auxin biosynthesis, peroxisomes and, 518
Auxin transport, in rice, *Oshox1* homeobox gene and, 1076, 1349

B

Bacteria, isoprenoid biosynthesis in, methylerythritol phosphate pathway for, 1079
Bacterial artificial chromosome libraries, of maize, anchoring physical map to genetic map in, 1686
Banana, developing, inactive class III chitinase with transient storage role in, 1063
Bark, of black mulberry tree, jacalin-related lectins in, 757
Barley
aleurone cells of, gibberellin-responsive genes in, BPBF transcription factor regulation of, 111
allelopathy in, 1746
endosperm of, amylose synthesis in, 190
leaves of
gene expression in, sugar status and, 1335
nucleus-target protein in, during senescence and pathogen infection, 1172
lipoxygenases in, 15
roots of, arbuscular mycorrhizal, jasmonate biosynthesis in, 1213
stress-induced *HVA22* gene in, vesicular traffic and, 1121
Basil, peltate glandular trichomes and leaves of, phenylpropanoid production in, 1536
Bean (*see also* Broad bean; Fava bean; Mung bean; Soybean)
abscission-specific cellulase from, regulation of, 1487
lipoxygenases in, 15
Beet, vacuolar glucose and glutathione conjugate uptake in, energy-dependent pathways for, 1562
Beta vulgaris (*see* Beet)
Betula pendula (*see* Birch)
Bicarbonate uptake, mitochondria-driven, in marine microalga, photosynthesis and, 284
Bilberry, fruit development in, anthocyanin biosynthesis and flavonol levels during, 729
BIN2 substrates, as nuclear components of brassinosteroid signaling, 1221
Birch, cell death and defense gene expression in, activation by hydrogen peroxide, 549
Black mulberry tree, bark of, jacalin-related lectins in, 757
Boron, in rhamnogalacturonan cross-linking, in pumpkin cell walls, 1967
Boron deprivation, maize and wheat cell wall pectin and, 415
BPBF transcription factor, in regulation of gibberellin-responsive genes in barley aleurone cells, 111
Brassica napus (*see* Oilseed rape)
Brassinosteroid(s)
Arabidopsis mutants insensitive to, glycogen synthase kinase and, 1506
genes regulated by, in Arabidopsis, microarray analysis of, 1319
in regulation of *TCH4* gene expression in Arabidopsis, 770
signaling by, BIN2 substrates as nuclear components of, 1221
Brassinosteroid biosynthesis
cytochrome P450 genes in, regulation in Arabidopsis, 494
C-22 oxidation in, in *Catharanthus roseus* and Arabidopsis, 930
defect of, in rice dwarf mutant, 1152
Breakthrough technologies, rapid structural phenotyping of plant cell wall mutants by enzymatic oligosaccharide fingerprinting, 1740, 1754
Brefeldin A, secretion inhibition by, 1102
Broad bean, lipoxygenases in, 15
Bundle sheath, of *Amaranthus edulis*, CO_2 resistance of, 964

C

Ca^{2+}/H^+ antiporter, regulation in mung bean, specificity of, 1054
C4H gene, in Arabidopsis, regulation of, 210
C-22 oxidation, in brassinosteroid biosynthesis pathway, in *Catharanthus roseus* and Arabidopsis, 930
Caffeic acid *O*-methyltransferase, in maize, down-regulation of, 1675
Calcium homeostasis, wheat root plasma membrane cation channels in, 1386
Calcium pump, in endoplasmic reticulum, of Arabidopsis, 1, 128
Calcium signaling pathway, abscisic acid convergence with, in Arabidopsis guard cells, 2152
Calcium-binding protein, vacuolar, in celery, phosphorylation regulation of, 675
Camellia sinensis (*see* Tea leaves)
Canola (*see* Oilseed rape)
Capsicum annuum (*see* Pepper)
Carbohydrates, in Arabidopsis starch mutants, nitrate and CO_2 interaction and, 1573
Carbon dioxide-triggered chloride release, from fava bean guard cells, stomatal closure and, 940
Carbon flux, in tobacco seeds, sterol C-24 methyltransferase control of, 303
Carbon metabolism, in *Lemna minor*, sulfate assimilation and, 1406
Carrot
arbuscular mycorrhiza fungus on, phosphorus and metabolic processes in, 1162
cells of, glycerophosphocholine phosphodiesterase in, 244
Caspases, in plants, 1764
Catharanthus roseus, brassinosteroid biosynthesis in, C-22 oxidation in, 930

Cation channels, in wheat root plasma membrane, cytosolic Ca^{2+} homeostasis and, 1386
Celery, vacuolar calcium-binding protein in, phosphorylation regulation of, 675
Cell death
activation by hydrogen peroxide, in birch, 549
in ozone-exposed tomato, ACC synthase and oxidase regulation of ethylene synthesis in, 1918
processes of, in tobacco hybrid lethality, 1776
Cell walls
mutants in, structural phenotyping by enzymatic oligosaccharide fingerprinting, 1740, 1754
of pumpkin, rhamnogalacturonan cross-linking in, germanium vs boron in, 1967
Cellulase, abscission-specific, in bean, regulation of, 1487
Cellulose synthase A gene, function in Arabidopsis embryogenesis, 1883
Ceratodon purpureus, gravitropic tip-growing cells of, 2095
Chitinase, inactive class III, storage role in developing banana fruit, 1063
Chlamydomonas reinhardtii
iron uptake by, multicopper oxidase in, 2039
photosystem II light-harvesting chlorophyll-*a/b* proteins in, *Lhc* gene family expression and, 325
sac mutants of, cysteine biosynthesis in, 2076
Chloride release, CO_2-triggered, from fava bean guard cells, stomatal closure and, 940
Chlorophyll, absorption and distribution of, in cyanobacteria, 1201
Chlorophyll *a/b* proteins
in barley leaves, sugar status and, 1335
light-harvesting, of *Chlamydomonas reinhardtii* photosystem II, *Lhc* gene family expression and, 325
Chloroplasts
of Arabidopsis
glyceraldehyde-3-phosphate dehydrogenase in, light regulation of, 1476
NifS-like protein in, in sulfur and selenium metabolism, 1309
of maize, light-dependent *lls1* cell death mediated by, 1894
Chromatin remodeling, memory factors and, 1090
Cinnamate 4-hydroxylase, inactivation of, and salicylic acid accumulation in tobacco cells, 1022
Circadian rhythm
in Arabidopsis
gibberellin biosynthesis and flowering time controlled by, 1770
phase-specific regulation by, 627
of tissue-specific gene expression, 102
in *Artemisia annua* β-pinene synthase expression, 477
in *spirodela oligorrhiza*, of photosystem II D1 phosphorylation in, 2069
Clarkia breweri, flowers and leaves of, damage-inducible acyltransferases in, 466
Clover, white, *enod40* gene family in, vascular function and, 514
COBRA family of GPI-anchored proteins, in Arabidopsis, 538
Cold, phospholipases C and D activation by, in Arabidopsis, 515, 999
Cold stress, in Arabidopsis, transcriptome changes in response to, 2129
Compost humic acids, maize root effects of, 1739, 1951
Corn (*see* Maize)
Cotton
composite *LKR/SDH* locus of lysine catabolism in, 147
GhTUB1 gene in, molecular characterization of, 666
leaves of, constituents of, ^{18}O spatial patterns of, 1008
seeds of, *N*-acylethanolamine metabolism in, 391
Cotyledons, of soybean, nitrix oxide synthase-mediated phytoalexin accumulation in, 1288
Cryptogein, tobacco glucose transport blockage by, 2177
Cucumber
lipoxygenases in, 15
seedlings of, oligogalacturonide- and auxin-induced alkalinization and growth responses in, 895
Cucumis sativum (*see* Cucumber)
Cucurbita moschata (*see* Pumpkin)
Cyanobacteria
light state transition in, 1201
plant-like ethylene receptor genes in, 1, 10
Cyclin-dependent kinase inhibitors NtKIS1a and NtKIS1b, in tobacco, 1860
CYP76B1 gene, in Jerusalem artichoke, in engineering herbicide tolerance in Arabidopsis and tobacco, 2, 179
CYP98A3 gene, in Arabidopsis, regulation of, 210
Cysteine biosynthesis, in *Chlamydomonas reinhardtii sac* mutants, 2076
Cytochrome P450 genes, in brassinosteroid biosynthesis, regulation in Arabidopsis, 494
Cytochrome P450 reductases, from hybrid poplar, 1837
Cytokinesis, organ-specific regulation of, in Arabidopsis, *PLEIADE* and *HYADE* loci in, 1, 312
Cytokinin signaling, KNAT2 homeodomain protein interaction with, in Arabidopsis, 657

D

Dahlia, flowers of, anthocyanidin 3-*O*-glucoside-6-*O*-malonyltransferase from, 2142
Dahlia variabilis (*see* Dahlia)
Dasheng, in rice genome, 1697
Daucus carota (*see* Carrot)
Defense gene expression, activation by hydrogen peroxide, in birch, 549
DegP1 thylakoid lumen protease, from Arabidopsis, 857
Deoxyhypusine synthase, in Asteraceae, 47
Diadinoxanthin cycle, ultraviolet B-induced reversal of, in *Phaeodactylum tricornutum* diatom, 1527
Disease resistance genes, in maize and sorghum, sequence analysis of, 1728, 1740
Drought stress
in Arabidopsis
CBF4 and, 639
plasma membrane aquaporins in recovery from, 2101
heat shock with, and gene expression in tobacco, 1143
invertase as target of, in maize ovary development, 591
in tomato, Arabidopsis CBF1 and, 618

E

Editorials, our new impact factor, 3
Editor's choice, National Plant Genomics Initiative, 1741
elongated mesocotyl1, as phytochrome-deficient mutant of maize, 155
Embryo
of Arabidopsis, dicer homolog required for development of, 516, 806
of *Fucus distichus*, auxin-sensitive development of, 292
Embryo development, *RASPBERRY3* gene and, 1073
Embryogenesis, in Arabidopsis, cellulose synthase A gene function in, 1883
Endocytosis, F-actin-dependent, maize cell wall pectin and, 415
Endo-β-mannanase, tomato fruit ripening and, 1254
Endoplasmic microtubules, in *Medicago truncatula* root hairs, 515, 977
Endoplasmic reticulum, Ca^{2+}/Mn^{2+} pump in, in Arabidopsis, 1, 128
Endoplasmic reticulum-derived structure, in Arabidopsis, induced by stress conditions, 1739, 1807
Endosperm
of barley, amylose synthesis in, 190
of wheat, ADP-glucose pyrophosphorylase in, 1464
Enhancer trap expression, in Arabidopsis, as teaching resource, 1747
enod40 gene family, in white clover, vascular function and, 514
Ethylene, KNAT2 homeodomain protein interaction with, in Arabidopsis, 657
Ethylene receptor, in Arabidopsis, ethylene pathway mutation effects on, 1983
Ethylene receptor genes, plant-like, in cyanobacteria, 1, 10
Ethylene response, auxin interaction with, during root hair development in Arabidopsis, 1908
Ethylene signaling, of tomato *LeCTR1* gene in Arabidopsis, 1132
Ethylene synthesis, ACC synthase and oxidase regulation of, in ozone-exposed tomato, 1918
Eustoma grandiflorum (*see* Lisianthus)
α-Expansin and expansin-like genes, in deepwater rice, 1396

F

F-actin-dependent endocytosis, maize cell wall pectin and, 415
Farnesene, catalyzed by sesquiterpene synthase-encoding gene in maize, after herbivore damage, 2049
Far-red block of greening response, phytochrome A-mediated, in Arabidopsis, *HEMA1* gene expression during, 402
Fatty acid conjugase/desaturase, from tung, molecular analysis of, 2027
Fava bean, guard cells of, CO_2-triggered chloride release from, stomatal closure and, 940
Fern, arsenic hyperaccumulation in, 1076, 1552
Ferredoxin-dependent heme oxygenase, required for phytochrome chromophore synthesis in Arabidopsis, 1958
Flavonol levels, during bilberry fruit development, 729
Floral reversion, in tomato, *SEPALLATA* gene and, 605
FLORICAULA/LEAFY ortholog, in grapevine, expression in meristematic regions, 68
Flower(s)
  of Arabidopsis, senescence of, MADS domain factor AGL15 and, 78
  of *Clarkia breweri*, damage-inducible acyltransferases in, 466
  of dahlia, anthocyanidin 3-*O*-glucoside-6-*O*-malonyltransferase from, 2142
Flowering time, in Arabidopsis, circadian control of, 1770
Foliage (*see also* Leaves)
  of pine, stomatal constraints and oxygenated monoterpenoid emission from, 1371
Fruit
  of Arabidopsis, maturation of, MADS domain factor AGL15 and, 78
  of banana, inactive class III chitinase with transient storage role in, 1063
  of bilberry, development of, anthocyanin biosynthesis and flavonol levels during, 729
  of tomato
    endo-β-mannanase and ripening of, 1254
    SEPALLATA gene and, 605
Fucus distichus, embryo development in, auxin sensitivity of, 292
Fungicide, disease resistance induced by, in tobacco, 138
Fungus
  arbuscular mycorrhizal
    on barley roots, jasmonate biosynthesis in, 1213
    on carrot, phosphorus and metabolic processes in, 1162
    metallothionein gene from, 58
  β-1,6-glucanase from, in grass, 1298
  tomato infected with, PR proteins in xylem sap of, 904
Fusarium oxysporum infection, in tomato, PR proteins in xylem sap of, 904

G

Genome analysis
  COBRA family of GPI-anchored proteins in Arabidopsis, 538
  expressed sequence tag-based, of rye under aluminum stress, 1706, 1739
  genes for phosphoinositide metabolism, in Arabidopsis, 22
  global changes in gene expression in response to high light in Arabidopsis, 1109
  of grass
    gramene in, 1606
    polyploidy in, 1587
  of maize, 1594, 1598
    anchoring physical map to, 1686
  of maize zein gene family, 1626
  nodule-specific transcripts in *Medicago truncatula*, 519
  of phytochrome A in sorghum, maize, and rice, 1614
  of rice, 1585, 1697
Germanium, in rhamnogalacturonan cross-linking, in pumpkin cell walls, 1967
Germination, efficiency of, cytosolic glutamine synthetase importance in, in maize, 1860
GhTUB1 gene, in cotton, molecular characterization of, 666
Gibberellin biosynthesis, in Arabidopsis, circadian control of, 1770
Gibberellin dioxygenases, in spinach, regulation by photoperiod, 2085
Gibberellin pathway, in pea, auxin regulation of, 1974
Gibberellin-responsive genes, in barley aleurone cells, BPBF transcription factor regulation of, 111
Gigaspora margarita, metallothionein gene from, 58
β-1,6-Glucanase, fungal, in grass, 1298
Glucose and glutathione conjugates, vacuolar uptake of, in beets, energy-dependent pathways for, 1562
Glucose transport, in tobacco cells, cryptogein blockage of, 2177
Glutamine synthetase, importance in germination efficiency, in maize, 1860
Glutathione biosynthesis, demand-driven, in Arabidopsis, 1927
Glutathione *S*-transferase
  induction by herbicide safeners, in Arabidopsis, 1497
  safener-inducible, in wheat, 362
Glycerophosphocholine phosphodiesterase, in carrot cells, 244
Glycine max (*see* Soybean)
Glycogen synthase kinase, and Arabidopsis brassinosteroid-insensitive mutants, 1506
Glycosylphosphatidylinositol-anchored proteins, COBRA family of, in Arabidopsis, 538
Glycosyltransfer activity, of pectin synthase from petunia pollen tubes, 374
Glyoxysomal membranes, of Arabidopsis, acyl-coenzyme A synthetase on, 2019
Gossypium hirsutum, composite *LKR/SDH* locus of lysine catabolism in, 147
GPI-anchored proteins (*see* Glycosylphosphatidylinositol-anchored proteins)
Grain crop production, allelopathy and, 1745
Gramene, for grass genomics, 1606
Grapevine, *FLORICAULA/LEAFY* ortholog in, expression in meristematic regions, 68
Grass
  endophytic fungal β-1,6-glucanase expression in, 1298
  genetic polyploidy in, 1587
Gravitropic response
  of Arabidopsis
    gravity persistence signal loci mutations and, 1075, 1426
    transcription profiling of, 515, 720
  of moss tip-growing cells, 2095
Greening response, of Arabidopsis, phytochrome A-mediated far-red block of, *HEMA1* gene expression during, 402
Growth response, oligogalacturonide- and auxin-induced, in cucumber seedlings, 895
Guard cells
  of Arabidopsis, calcium signaling pathway convergence with abscisic acid in, 2152
  of fava bean, CO_2-triggered chloride release from, stomatal closure and, 940

H

H^+-ATPase activity, in maize root plasma membrane, compost humic acids and, 1739, 1951
HAK potassium transporters, in rice, 784
Heat shock, drought stress with, and gene expression in tobacco, 1143
Helianthus tuberosus (*see* Jerusalem artichoke)
HEMA1 gene expression, during phytochrome A-mediated far-red block of greening response, in Arabidopsis, 402
Heme oxygenase, ferredoxin-dependent, required for phytochrome chromophore synthesis in Arabidopsis, 1958
Herbicide, engineering tolerance to, in tobacco and Arabidopsis, *CYP76B1* in, 2, 179
Herbicide safeners, glutathione *S*-transferase induction by, in Arabidopsis, 1497
Herbivore
  maize damaged by, sesquiterpene synthase-encoding gene catalysis of farnesene and nerolidol after, 2049
  octadecanoid-mediated resistance to, in tomato, 494
Homospermidine synthase, localization in Asteraceae, 47
Hordeum vulgare (*see* Barley)
Hot and classic
  allelopathy and grain crop production, 1745
  lycopene and human health, 1077
  peroxisomes: organelles of diverse function, 517
Humic acids, in compost, maize root effects of, 1739, 1951
HYADE locus, in organ-specific regulation of cytokinesis, in Arabidopsis, 1, 312
Hydrilla verticillata, phosphoenolpyruvate carboxylase isoforms in, 876
Hydrogen peroxide

accumulation in ozone-exposed tomato, ACC synthase and oxidase regulation of ethylene synthesis in, 1918
cell death and defense gene activation by, in birch, 549
Hydroxyisourate hydrolase gene, in soybean, 2061
3-Hydroxy-3-methylglutaryl coenzyme A reductase, squalene synthase and squalene epoxidase regulation of, in tobacco cells, 334
Hypoosmolarity, proline dehydrogenase gene expression responsive to, in Arabidopsis, ACTCAT and, 709

I

Ice plant, leaves of, chemical composition of, salt stress and, 1032
Indoleacetic acid, distribution in Arabidopsis leaves, vascular differentiation and, 199
Insect footsteps, on leaves, 4-aminobutyrate stimulation by, 514
Intron, gene expression enhanced by, in maize, 516, 918
Intron-mediated enhancement of gene expression, in maize, 516, 918
Invertase, as drought stress target, in maize ovary development, 591
Ion channel regulation, during abscisic acid signaling, in Arabidopsis, 1075, 1276
Iron, availability in maize, nitric oxide and, 1852
Iron deficiency, regulatory and transporter gene induction and, in tomato roots, 1361
Iron uptake, by *Chlamydomonas reinhardtii*, multicopper oxidase in, 2039
Isoprenoid biosynthesis, in bacteria in plastids, methylerythritol phosphate pathway for, 1079

J

Jacalin-related lectins, in black mulberry tree bark, 757
Jasmonate biosynthesis, in arbuscular mycorrhizal barley roots, 1213
Jasmonate response, in auxin-signaling mutant of Arabidopsis, 887
Jerusalem artichoke, *CYP76B1* from, in engineering herbicide tolerance in Arabidopsis and tobacco, 2, 179
Juglans nigra × *regia* tree (*see* Walnut tree)

K

Kernels, of maize, starch biosynthesis and intermediary metabolism in, NMR analysis of, 1717
Kinase, abiotic stress-induced dual specificity, from peanut, 380
Kinase inhibitors NtKIS1a and NtKIS1b, cyclin-dependent, in tobacco, 1860
KNAT2 homeodomain protein, in Arabidopsis, interaction with ethylene and cytokinin signaling, 657

L

Leaves (*see also* Foliage)
of Arabidopsis
chemical composition of, salt stress and, 1032
indoleacetic acid distribution and vascular differentiation in, 199
of barley
gene expression in, sugar status and, 1335
nucleus-target protein in, during senescence and pathogen infection, 1172
of basil, phenylpropanoid production in, 1536
of *Clarkia breweri*, damage-inducible acyltransferases in, 466
of cotton, constituents of, ^{18}O spatial patterns of, 1008
of ice plant, chemical composition of, salt stress and, 1032
insect footsteps on, 4-aminobutyrate stimulation by, 514
of maize, turning away from neighbors, 1075, 1181
of oilseed rape, photorespiratory NH_4^+ production in, 989
tea, β-primeverosidase from, aroma and, 2164
of tobacco, mesophyll conductance in, temperature response of, 1992
Lectins, jacalin-related, in black mulberry tree bark, 757
LeCTR1 gene, from tomato, ethylene signaling ability in Arabidopsis, 1132
Lemna minor, carbon and nitrogen metabolism in, sulfate assimilation and, 1406
Lens culinaris (*see* Lentil)
Lentil, lipoxygenases in, 15
Lhc gene family expression, and light-harvesting chlorophyll-*a*/*b* proteins of *Chlamydomonas reinhardtii* photosystem II, 325
Light (*see also* Ultraviolet B light)
high, Arabidopsis gene expression response to, 1109
in regulation of glyceraldehyde-3-phosphate dehydrogenase, in Arabidopsis chloroplasts, 1476
in regulation of photosynthetic apparatus and phycobilisome structure, in *Plectonema boryanum*, 1414
Light acclimation, of rice photosynthesis, 1999
Light state transition, in *Synechoccus*, 1201
Light/darkness, in regulation of *TCH4* gene expression in Arabidopsis, 770
Light-dependent *lls1* cell death, mediated by maize chloroplasts, 1894
Light-harvesting chlorophyll-*a*/*b* proteins, of *Chlamydomonas reinhardtii* photosystem II, *Lhc* gene family expression and, 325
Light-harvesting proteins, proteomics of, in different plant species, 1938
Lilium longiflorum (*see* Lily)
Lily, MADS box gene from, Arabidopsis sepal and petal homeotic conversion induced by, 1827
Lipoxygenase(s)
Alstroemeria peruviana floral senescence and, 273
physiological and molecular features of, in plants, 15
Lisianthus, MADS box gene from, Arabidopsis sepal and petal homeotic conversion induced by, 1827
LKR/SDH locus, composite, of lysine catabolism, 147
lls1 cell death, light-dependent, mediated by maize chloroplasts, 1894
Lycopene, human health and, 1077
Lycopersicon esculentum (*see* Tomato)
Lysine catabolism, composite *LKR/SDH* locus of, 147

M

MADS box gene, from lily and lisianthus, Arabidopsis sepal and petal homeotic conversion induced by, 1827
MADS domain factor AGL15, effect on flower senescence and fruit maturation, in Arabidopsis, 78
Maize
allelopathy in, 1745
bacterial artificial chromosome libraries in, 1686
caffeic acid *O*-methyltransferase down-regulation in, 1675
chloroplasts of, light-dependent *lls1* cell death mediated by, 1894
composite *LKR/SDH* locus of lysine catabolism in, 147
early ovary development of, drought stress and, 591
genome sequencing project of, 1594
genomic map resources for, 1598
germination efficiency in, cytosolic glutamine synthetase importance in, 1860
intron-mediated enhancement of gene expression in, 516, 918
iron availability in, nitric oxide and, 1852
kernels of, starch biosynthesis and intermediary metabolism in, NMR analysis of, 1717
leaves of, turning away from neighbors, 1075, 1181
mitochondria of, aldehyde dehydrogenases in, 1657
phytochrome A in, genome analysis of, 1614
phytochrome-deficient mutant of, 155
pollen maturation in, starch biosynthesis during, 1645, 1740
roots of
cell wall pectins in
boron deprivation and, 415
F-actin-dependent endocytosis of, 422
compost humic acids and proton pumping in, 1739, 1951
Rp1 resistance gene complex in, sequence analysis of, 1728, 1740
sesquiterpene synthase-encoding gene in, formation of farnesene and nerolidol catalyzed by, after herbivore damage, 2049
zein gene family from, analysis of, 1626
Manganese pump, in endoplasmic reticulum, of Arabidopsis, 1, 128
Mapping, genomic, of maize, 1598

anchoring physical map to, 1686
Marine microalga, mitochondrial driven bicarbonate uptake in, photosynthesis and, 284
Medicago sativa, phloem transport of ascorbic acid in, 649
Medicago truncatula
nodule-specific transcripts in, 519
root hairs of, endoplasmic microtubules in, 515, 977
Meristematic region, of grapevine, *FLORICAULA/LEAFY* ortholog in, 68
Mesembryanthemum crystallinum (*see* Ice plant)
Mesophyll conductance, in tobacco leaves, temperature response of, 1992
Metallothionein gene, from arbuscular mycorrhizal fungus, 58
Methylerythritol phosphate pathway, for isoprenoid biosynthesis, in bacterial and plastids, 1079
Microtubules, endoplasmic, in *Medicago truncatula* root hairs, 515, 977
Mitochondria
of maize, aldehyde dehydrogenases in, 1657
of marine microalga, bicarbonate uptake driven by, photosynthesis and, 284
Monoterpenoids, oxygenated, emission from pine foliage, stomatal constraints and, 1371
Morus nigra (*see* Black mulberry tree)
Moss, gravitropic tip-growing cells of, 2095
Mulberry tree, bark of, jacalin-related lectins in, 757
Multicopper oxidase, in iron uptake by *Chlamydomonas reinhardtii*, 2039
Mung bean, Ca^{2+}/H^{+} antiporter regulation in, specificity of, 1054
Musa (*see* Banana)
Mycorrhizal fungus, arbuscular
on barley roots, jasmonate biosynthesis in, 1213
on carrot, phosphorus and metabolic processes in, 1162
metallothionein gene from, 58
Myriophyllum spicatum, polyphenolic allelochemicals from, photosystem II inhibition by, 2011

N

NADPH-cytochrome P450 reductases, from hybrid poplar, 1837
Nannochloropsis gaditana, mitochondrial driven bicarbonate uptake in, photosynthesis and, 284
National Plant Genomics Initiative, 1741
Neotyphodium fungus, β-1,6-glucanase from, in grass, 1298
Nerolidol, catalyzed by sesquiterpene synthase-encoding gene in maize, after herbivore damage, 2049
News from archives, ouabain-sensitive ATPases, 4
NH_4^+ transporter family, in Arabidopsis, functional analysis of, 1263
NH_4^+ production, photorespiratory, in oilseed rape leaves, 989
Nicotiana (*see* Tobacco)
NifS-like protein, in Arabidopsis chloroplasts, in sulfur and selenium metabolism, 1309
Nitric oxide
effect on iron availability in maize, 1852
wound signaling and, in tomato, 487
Nitric oxide synthase, phytoalexin accumulation in soybean cotyledons mediated by, 1288
Nitric oxide synthesis, peroxisomes and, 518
Nitrogen, remobilization in walnut trees, 1043
Nitrogen metabolism
germination efficiency relation to, in maize, glutamine synthetase importance in, 1860
in *Lemna minor*, sulfate assimilation and, 1406
NtKIS1a and NtKIS1b cyclin-dependent kinase inhibitors, in tobacco, 1860

O

Ocimum basilicum (*see* Basil)
Octadecanoid, herbivore resistance mediated by, in tomato, 494
Oilseed rape
leaves of, photorespiratory NH_4^+ production in, 989
seeds of, stable isotope labeling of, 347
Oligogalacturonide, alkalinization and growth response induced by, in cucumber seedlings, 895
Oligosaccharide fingerprinting, structural phenotyping of plant cell wall mutants by, 1740, 1754
Oryza sativa (*see* Rice)
Oshox1 homeobox gene, and auxin transport in rice, 1076, 1349
Osmotic stress, in Arabidopsis, transcriptome changes in response to, 2129
Ouabain sensitivity, of plant ATPases, 4
Ovary development, in maize, drought stress invertase targeting and, 591
Oxidative stress, tobacco *activation sequence-1*-like element responsiveness to, salicylic acid activation of, 1516
Oxygenated monoterpenoids, emission from pine foliage, stomatal constraints and, 1371

P

Palatin-related phospholipase A, in Arabidopsis, signal transduction and, 90
Pea
gibberellin pathway in, auxin regulation of, 1974
lipoxygenases in, 15
Peanut
abiotic stress-induced dual specificity kinase from, 380
lipoxygenases in, 15
Pectin(s)
in root apical cell walls of maize, F-actin-dependent endocytosis of, 422
in root apical cell walls of maize and wheat, boron deprivation and, 415
Pectin synthase, from petunia pollen tubes, glycosyltransfer activity of, 374
Peltate glandular trichomes, of basil, phenylpropanoid production in, 1536
Pepper, xylem sap composition of, spittlebug and, 1075, 1436
Peroxisome(s), diverse functions of, 517
Petal, of Arabidopsis, lily and lisianthus MADS box gene-induced homeotic conversion in, 1827
Petunia, pollen tubes of, pectin synthase from, glycosyltransfer activity of, 374
Petunia axillaris (*see* Petunia)
Phaeodactylum tricornutum diatom, ultraviolet B-induced reversal of diadinoxanthin cycle in, 1527
Phaseolus vulgaris (*see* Bean)
Phenylalanine ammonia-lyase genes, in quaking aspen, metabolism and, 796
Phenylpropanoid production, in basil peltate glandular trichomes and leaves, 1536
Phloem, RNA traffic mediated by, potato spindle tuber viroid and, 138
Phloem transport, of ascorbic acid, in Arabidopsis and *Medicago sativa*, 649
Phosphate transporters, in Arabidopsis, regulated expression of, 2, 221
Phosphoenolpyruvate carboxylase isoforms, from *Hydrilla verticillata*, 876
Phosphoinositide metabolism, genes for, in Arabidopsis, 22
Phospholipase A, palatin-related, in Arabidopsis, signal transduction and, 90
Phospholipase C and D, cold-activated, in Arabidopsis, 515, 999
Phospholipase D, activation in Arabidopsis, *RAB18* expression and, 265
Phosphorus, carrot arbuscular mycorrhizal fungus metabolic processes and, 1162
Phosphorus deficiency, regulatory and transporter gene induction and, in tomato roots, 1361
Phosphorylation, vacuolar calcium-binding protein regulated by, in celery, 675
Photomorphogenesis, peroxisomes and, 517
Photoperiod, spinach gibberellin dioxygenase regulation by, 2085
Photorespiratory NH_4^+ production, in oilseed rape leaves, 989
Photosynthesis
in *Amaranthus edulis*, and bundle sheath resistance to CO_2, 964
in *Hydrilla verticillata*, 876
in marine microalga, mitochondria-driven bicarbonate uptake and, 284
in rice, light acclimation in, 1999
Photosynthetic apparatus, in *Plectonema boryanum*, regulation by light and temperature, 1414
Photosystem II
light-harvesting chlorophyll-*a/b* proteins of, in *Chlamydomonas reinhardtii*, *Lhc* gene family expression and, 325
polyphenolic allelochemical inhibition of, in *Myriophyllum spicatum*, 2011
repair of, in *Synechocystis*, salt stress and, 1443
Photosystem II D1 phosphorylation, in *Spirodela oligorrhiza*, circadian control of, 2069
Phycobilin, absorption and distribution of, in cyanobacteria, 1201

Phycobilisome structure, in *Plectonema boryanum*, regulation by light and temperature, 1414
Phytoalexin, accumulation in soybean cotyledons, nitrix oxide synthase and, 1288
Phytochrome(s), of Arabidopsis, patterns and levels of, 442
Phytochrome A
far-red block of greening response mediated by, *HEMA1* gene expression during, in Arabidopsis, 402
in sorghum, maize, and rice, genome analysis of, 1614
Phytochrome A mutation, in Arabidopsis, 457
Phytochrome chromophore synthesis, ferredoxin-dependent heme oxygenase required for, in Arabidopsis, 1958
Phytochrome-deficient mutant, of maize, 155
Phytolacca americana (*see* Pokeweed)
Pine, foliage, stomatal constraints and oxygenated monoterpenoid emission from, 1371
β-Pinene synthase, from *Artemisia annua*, circadian expression of, 477
Pinus pinea (*see* Pine)
Pisum sativum (*see* Pea)
Plasma membrane, of Arabidopsis, ammonium transporter AtAMT2 in, 1788
Plasma membrane H^+-ATPase activity, in maize root, compost humic acids and, 1739, 1951
Plastid inner envelope membrane proteins, of Arabidopsis, 823
Plastids, isoprenoid biosynthesis in, methylerythritol phosphate pathway for, 1079
Plectonema boryanum, photosynthetic apparatus and phycobilisome structure, regulation by light and temperature, 1414
PLEIADE locus, in organ-specific regulation of cytokinesis, in Arabidopsis, 1, 312
Poa ampla grass, fungal β-1,6-glucanase in, 1298
Pokeweed, ribosome-inactivating protein from, 164
Pollen maturation, starch biosynthesis during, in maize, 1645, 1740
Pollen tubes
growth of, ACC synthase and oxidase effect on, in tobacco, 1190
of petunia, pectin synthase from, glycosyltransfer activity of, 374
Polyamines, in Arabidopsis wound response, 1454
Polymerase chain reaction, real time reverse transcriptase, in profiling Arabidopsis shaggy-like kinase multigene family, 577
Polyploidy, in grass genome evolution, 1587
Poplar, hybrid, NADPH-cytochrome P450 reductases from, 1837
Populus (*see* Aspen; Poplar)
Potassium deficiency, regulatory and transporter gene induction and, in tomato roots, 1361
Potassium transporters, in rice, 784
Potato, lipoxygenases in, 15
Potato spindle tuber viroid, in regulation of phloem-mediated RNA traffic, 138
PR proteins, in xylem sap of fungus-infected tomato, 904
β-Primeverosidase, in tea leaves, aroma and, 2164
Proanthocyanidin pathway mutants, in Arabidopsis, 561
Proline dehydrogenase gene, in Arabidopsis, proline- and hypoosmolarity-responsive expression of, ACTCAT and, 709
Prostate cancer, lycopene and, 1077
Protein kinase, abscisic acid-responsive, interaction with TaABF, in wheat, 837
Protein kinase SOS2, in Arabidopsis, salt tolerance and, 256
Pseudomonas syringae, tobacco resistance to, strobiluirn fungicide and, 120
Pteris vittata (*see* Fern)
Ptr ToxA-induced tan spot disease, in wheat, arginyl-glycyl-aspartic motif in, 1545
Pumpkin, cell walls of, rhamnogalacturonan cross-linking in, germanium vs boron in, 1967
Pyrenophora teres infection, nucleus-target protein in barley leaves during, 1172

R

RAB18 expression, phospholipase D activation and, in Arabidopsis, 265
RASPBERRY3 gene, embryo development and, 1073
Reactive oxygen species, in tobacco cell apoptosis, 698
Resources and opportunities, Arabidopsis enhancer trap expression patterns as novel teaching resource, 1747
Rhamnogalacturonan cross-linking, in pumpkin cell walls, germanium vs boron in, 1967
Ribosome-inactivating protein, from pokeweed, 164
Rice
activation tagging in, T-DNA insertional mutagenesis for, 1636
allelopathy in, 1745
auxin transport in, *Oshox1* homeobox gene and, 1076, 1349
deepwater, α-expansin and expansin-like genes in, 1396
dwarf mutant of, brassinosteroid biosynthesis defect in, 1152
genome of, *Dasheng* and *RIRE2* in, 1697
genome sequence of, 1585
HAK potassium transporters in, 784
lipoxygenases in, 15
photosynthesis in, light acclimation in, 1999
phytochrome A in, genome analysis of, 1614
silicon uptake defective mutant of, 2111
RIRE, in rice genome, 1697
RNA(s), short, in identification of transposable element families in Arabidopsis, 6
RNA traffic, phloem-mediated, potato spindle tuber viroid and, 138
Root(s)
of barley, arbuscular mycorrhizal, jasmonate biosynthesis in, 1213
of maize
cell wall pectins in
boron deprivation and, 415
F-actin-dependent endocytosis of, 422
compost humic acids and proton pumping in, 1739, 1951
of pokeweed, ribosome-inactivating protein from, 164
of tomato, regulatory and transporter gene induction in, in phosphorus, potassium, and iron deficiencies, 1361
of wheat
cation channel in, cytosolic Ca^{2+} homeostasis and, 1386
cell wall pectins in, boron deprivation and, 415
Root hairs
in Arabidopsis, auxin and ethylene response interaction during development of, 1908
of Arabidopsis *act2–1* mutant, actin isovariants and, 2199
of *Medicago truncatula*, endoplasmic microtubules in, 515, 977
Root nodules, of *Medicago truncatula*, transcripts specific to, 519
Rubisco, in Arabidopsis starch mutants, nitrate and CO_2 interaction and, 1573
Rubisco enyzme kinetics, in tobacco leaves, 1992
Rubisco small subunit gene, in barley leaves, sugar status and, 1335
Rye, aluminum stress in, expressed sequence tag-based gene expression analysis under, 1706, 1739

S

Safeners, glutathione *S*-transferase induction by
in Arabidopsis, 1497
in wheat, 362
Salicylic acid
accumulation in tobacco cells, cinnamate 4-hydroxylase inactivation and, 1022
oxidative stress-responsive tobacco *activation sequence-1*-like element activation by, 1516
Salt stress
in Arabidopsis, transcriptome changes in response to, 2129
and chemical composition of Arabidopsis and ice plant leaves, 1032
and photosystem II repair in *Synechocystis*, 1443
Salt tolerance, in Arabidopsis
genetics of, 515, 951
protein kinase SOS2 and, 256
Scientific correspondence
do plant caspases exist?, 1764
short RNAs can identify new candidate transposable element families in Arabidopsis, 6
Secale cereale (*see* Rye)
Seedlings, of cucumber, oligogalacturonide- and auxin-induced alkalinization and growth responses in, 895
Seeds

of Arabidopsis, ABI5 subfamily members in, 688
of cotton, *N*-acylethanolamine metabolism in, 391
of oilseed rape, stable isotope labeling of, 347
of tobacco, carbon flux in, sterol C-24 methyltransferase control of, 303
Selenium
metabolism in Arabidopsis chloroplasts, NifS-like protein and, 1309
volatilization of, S-adenosyl-L-methionine:L-methionine *S*-methyltransferase in, in Arabidopsis, 847
Senecio vernalis (*see* Asteraceae)
Senescence, nucleus-target protein in barley leaves during, 1172
Senescence of flowers
of *Alstroemeria peruviana*, lipoxygenase and, 273
of Arabidopsis, AGL15 and, 78
Sepal, of Arabidopsis, lily and lisianthus MADS box gene-induced homeotic conversion in, 1827
SEPALLATA gene, in tomato, in fruit development and floral reversion, 605
Sesquiterpene synthase-encoding gene, in maize, formation of farnesene and nerolidol catalyzed by, after herbivore damage, 2049
Shaggy-like kinase multigene family, in Arabidopsis, profiling by real time reverse transcriptase PCR, 577
SHORT INTEGUMENTS1/SUSPENSOR1/CARPEL FACTOR dicer homolog, in Arabidopsis embryo development, 516, 806
Signal transduction, palatin-related phospholipase A and, in Arabidopsis, 90
Silicon uptake, rice mutant defective in, 2111
Sink tissue, phloem transport of ascorbic acid to, in Arabidopsis and *Medicago sativa*, 649
Solanum tuberosum (*see* Potato)
Sorghum
allelopathy in, 1746
phytochrome A in, genome analysis of, 1614
Rph region of, sequence analysis of, 1728, 1740
Sorghum bicolor (*see* Sorghum)
Soybean
cotyledons of, nitrix oxide synthase-mediated phytoalexin accumulation in, 1288
hydroxyisourate hydrolase gene in, 2061
lipoxygenases in, 15
SP1, from aspen, 865
Spinach, gibberellin dioxygenases in, regulation by photoperiod, 2085
Spinacia oleracea (*see* Spinach)
Spirodela oligorrhiza, phosphorylation of D1 photosystem II reaction in, circadian control of, 2069
Spittlebug, xylem sap composition and, in pepper, 1075, 1436
Squalene synthase and squalene epoxidase, in regulation of 3-hydroxy-3-methylglutaryl coenzyme A reductase, in tobacco cells, 334
Starch biosynthesis
in maize kernels, NMR analysis of, 1717
during pollen maturation, in maize, 1645, 1740
Sterol C-24 methyltransferase, in contol of tobacco seed carbon flux, 303
Stomatal closure, and CO_2-triggered chloride release from fava bean guard cells, 940
Stomatal constraints, on pine foliage, oxygenated monoterpenoid emission and, 1371
Storage lipids and proteins, stable isotope labeling of, in oilseed rape seeds, 347
Stress (*see also specific stressor*)
in Arabidopsis, endoplasmic reticulum-derived structure induced under, 1739, 1807
Stress-induced *HVA22* gene, in barley, vesicular traffic and, 1121
Stress-responsive dual specificity kinase, from peanut, 380
Strobilurin fungicide, in enhancing tobacco resistance to *Pseudomonas syringae* and tobacco mosaic virus, 120
Sucrose:fructan-6-fructosyl transferase gene, in barley leaves, sugar status and, 1335
Sugar status, and gene expression in barley leaves, 1335
Sulfate assimilation, carbon and nitrogen metabolism interaction with, in *Lemna minor*, 1406
Sulfite oxidase, peroxisomes and, 517
Sulfur metabolism, in Arabidopsis chloroplasts, NifS-like protein and, 1309
Synechoccus, light state transition in, 1201
Synechocystis, photodamaged photosystem II repair in, salt stress and, 1443

T

TaABF, abscisic acid-responsive protein kinase interaction with, in wheat, 837
Tan spot disease, caused by Ptr ToxA in wheat, arginyl-glycyl-aspartic motif in, 1545
TCH4 gene expression, in Arabidopsis, regulation by diverse stimuli and brassinosteroids, 770
T-DNA insertional mutagenesis, for activation tagging in rice, 1636
Tea leaves, β-primeverosidase from, aroma and, 2164
Temperature
mesophyll conductance response to, in tobacco leaves, 1992
in regulation of photosynthetic apparatus and phycobilisome structure, in *Plectonema boryanum*, 1414
in regulation of *TCH4* gene expression in Arabidopsis, 770
Thylakoid lumen protease DegP1, from Arabidopsis, 857
Tobacco
activation sequence-1-like element in, oxidative stress-responsiveness of, salicylic acid activation of, 1516
apoptosis in, antioxidants and reactive oxygen species in, 698
cells of, 3-hydroxy-3-methylglutaryl coenzyme A reductase in, squalene synthase and squalene epoxidase regulation of, 334
cellular salicylic acid accumulation in, cinnamate 4-hydroxylase inactivation and, 1022
cyclin-dependent kinase inhibitors NtKIS1a and NtKIS1b in, 1860
engineering herbicide tolerance in, *CYP76B1* in, 2, 179
gene expression in, drought stress with heat shock effect on, 1143
glucose transport in, cryptogein blockage of, 2177
hybrid lethality in, cell death processes during, 1776
leaves of, mesophyll conductance in, temperature response of, 1992
phloem-mediated RNA traffic in, potato spindle tuber viroid and, 138
pollen tube growth in, ACC synthase and oxidase effect on, 1190
resistance to *Pseudomonas syringae* and tobacco mosaic virus, strobiluirn fungicide and, 120
seeds of, carbon flux in, sterol C-24 methyltransferase control of, 303
Tobacco mosaic virus, tobacco resistance to, strobiluirn fungicide and, 120
Tomato
composite *LKR/SDH* locus of lysine catabolism in, 147
expressing Arabidopsis CBF1, water deficit resistance in, 618
fruit of, endo-β-mannanase and ripening of, 1254
fungus-infected, PR proteins in xylem sap of, 904
LeCTR1 gene from, ethylene signaling ability in Arabidopsis, 1132
light-harvesting protein proteomics in, 1938
lipoxygenases in, 15
octadecanoid-mediated resistance to herbivores in, 494
ozone-exposed, ethylene synthesis in, ACC synthase and oxidase regulation of, 1918
roots of, regulatory and transporter gene induction in, in phosphorus, potassium, and iron deficiencies, 1361
SEPALLATA gene in, in fruit development and floral reversion, 605
wound signaling in, nitric oxide and, 487
Triticum (*see* Wheat)
Tung, fatty acid conjugase/desaturase from, molecular analysis of, 2027

U

Ubiquitin-conjugating enzymes, molecular characterization of, 1221
UDP-xylose biosynthesis, in Arabidopsis, 2188
Ultraviolet B light
Arabidopsis mutant hypersensitive to, 234
in reversal of diadinoxanthin cycle, in *Phaeodactylum tricornutum* diatom, 1527
Updates
on brefeldin A, secretion inhibition by, 1102
on chromatin and development, chromatin remodeling and memory factors, 1090

on genomics, current status of rice genome sequence, 1585
on gramene, for grass genomics, 1606
on isoprenoid biosynthesis, in bacteria in plastids, methylerythritol phosphate pathway for, 1079
on maize genome sequencing project, 1594
on map resources for maize, 1598
on plant lipoxygenases, physiological and molecular features of, 15
on polyploidy in grass, 1587

V

Vaccinium myrtillus (*see* Bilberry)
Vacuolar calcium-binding protein, in celery, phosphorylation regulation of, 675
Vascular differentiation, in Arabidopsis leaves, indoleacetic acid distribution and, 199
Vicia faba (*see* Fava bean)
Vigna radiata (*see* Mung bean)
Vitis vinifera (*see* Grapevine)
Volatilization, of selenium, *S*-adenosyl-L-methionine:L-methionine *S*-methyltransferase in, in Arabidopsis, 847

W

Walnut tree, nitrogen remobilization in, 1043
Water, in cotton leaf vein xylem, ^{18}O spatial patterns of, 1008
Wheat
abscisic acid-responsive protein kinase PKABA1 in, interaction with TaABF, 837
allelopathy in, 1745
arabinoxylan biosynthesis in, 432
endosperm of, ADP-glucose pyrophosphorylase in, 1464
Ptr ToxA-produced tan spot disease in, arginyl-glycyl-aspartic motif in, 1545
root plasma membranes of, cation channel in, cytosolic Ca^{2+} homeostasis and, 1386
roots of
cation channel in, cytosolic Ca^{2+} homeostasis and, 1386
cell wall pectins in, boron deprivation and, 415
safener-induced glutathione *S*-transferase in, 362
White clover, *enod40* gene family in, vascular function and, 514
Wound response, of Arabidopsis, polyamines in, 1454
Wound signaling, nitric oxide and, in tomato, 487

X

Xylem, of cotton leaf veins, water in, ^{18}O spatial patterns of, 1008
Xylem sap
of fungus-infected tomato, PR proteins in, 904
of pepper, spittlebug and, 1075, 1436

Z

Zea mays (*see* Maize)
Zein gene family, in maize, genome analysis of, 1626
Zinc, accumulation in Arabidopsis, 1815